Exemption No. 6775
Regulatory Docket No. 29013

May 27, 1998

Mr. W.D. Hospers President Vintage Flying Museum P.O. Box 820099 Fort Worth, TX 76182

Dear Mr. Hospers:

By letter dated August 20, 1997, you petitioned the Federal Aviation Administration (FAA) on behalf of the Vintage Flying Museum (Vintage) for an exemption from Section 91.315 of Title 14, Code of Federal Regulations (14 CFR) to the extent necessary to permit Vintage to operate its Boeing B-17G (B-17G) aircraft, which is certificated in the limited category, for the purpose of carrying passengers for compensation or hire.

Please note that the relief you request also requires an exemption from 14 CFR Section 119.5(g) and 119.21(a). Therefore, the FAA will address your petition as a request for an exemption from Sections 91.315, 119.5(g), and 119.21(a).

The FAA issued grants of exemption in circumstances similar in all material respects to those presented in your petition. In Grant of Exemption Nos. 6540, 6541, and 6565 (copies enclosed), the FAA found that preserving historic U.S. aircraft is in the public interest, in the same manner that preserving historic buildings, landmarks, and neighborhoods has been determined to be in the public interest. While aviation history can be represented with static displays in museums in the same manner that historic landmarks can be represented in museums, the public has shown a willingness to support the preservation and operation of World War II vintage airplanes and a desire to experience flights in these historic airplanes.

The FAA also recognized that the only way to maintain vintage World War II airplanes in an operational status is to accept financial contributions to defray the high costs of maintaining those aircraft. In return, paying members of the public have the opportunity to experience a local flight in an historic aircraft. Without these contributions, it is reasonable to conclude that operators of these aircraft would not be able to raise sufficient funds to maintain the aircraft and provide flying experiences to the public.

The FAA noted that individuals who choose to accept a flight experience in these airplanes differ from the general traveling public. These passengers support the continued operation of historic airplanes through a substantial monetary donation. Many of these passengers are familiar with the airplane's military

history and are aware that it is not a standard category aircraft. Unlike passengers who purchase tickets on an aircraft used for airline travel solely for transportation, these passengers are specifically seeking the experience of flying in historic airplanes.

The FAA finds that the operation of former military aircraft raises significant safety issues, such as life-limited parts and aircraft design. Additionally, the FAA has determined that all flight crewmembers are required to meet stringent qualifications and training requirements. Therefore, certain conditions and limitations have been included in this and previously issued exemptions to standardize the maintenance and inspection of the B-17G aircraft when it is operated under the authority of this exemption and to ensure Vintage is maintaining highly skilled and qualified pilots to operate its airplane.

Finally, the FAA has initiated rulemaking to allow operators of U.S. vintage military aircraft to provide flight experiences to the public for compensation or hire. The FAA believes that if these operations conform to the rules similar to the conditions and limitations in this exemption, the public will be provided an adequate level of safety while given the opportunity to experience flight in U.S. World War II vintage military aircraft.

Having reviewed your reasons for requesting an exemption, I find that they do not differ materially from those presented by the petitioners in the enclosed grants of exemption. In addition, I have determined that the reasons stated by the FAA for granting the enclosed exemptions also apply to the situation you present.

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. Sections 40113 and 44701, delegated to me by the Administrator (14 CFR Section 11.53), the Vintage Flying Museum is granted an exemption from 14 CFR Sections 91.315, 119.5(g), and 119.21(a) to the extent necessary to operate its former military B-17G aircraft, which is certificated in the limited category, for the purpose of carrying passengers on local flights in return for receiving donations, subject to the following conditions and limitations:

- 1. Vintage must maintain its B-17G aircraft in accordance with the
  - a. Maintenance requirements as specified in its B-17G type specification sheet, as amended;
  - b. FAA-approved maintenance inspection program that meets the requirements of Section 91.409; and
  - c. B-17G military technical manuals.

- 2. The pilot in command (PIC) must
  - a. Hold at least a commercial pilot certificate with a multiengine airplane rating, an airplane instrument rating, and a B-17G type rating;
  - b. Have completed Vintage's B-17G qualification and recurrent flight and ground training program within the previous 12 calendar months;
  - c. Have at least a total of 2,500 hours of aeronautical flight experience, 1,000 hours of aeronautical flight experience in multiengine airplanes, and 25 hours in a B-17G; or have at least a total of 1,000 hours of aeronautical flight experience, 200 hours of aeronautical flight experience in multiengine airplanes, and 100 hours and 50 takeoffs and 50 landings in a B-17G; and
  - d. Have accomplished three takeoffs and three landings to a full stop in a B-17G within the previous 90 days before serving as PIC.
- 3. The second in command (SIC) must
  - a. Hold at least a commercial pilot certificate with a multiengine airplane rating and an airplane instrument rating;
  - b. Have completed Vintage's B-17G qualification and recurrent flight and ground training program within the previous 12 calendar months;
  - c. Have at least a total of 1,500 hours of aeronautical flight experience and 250 hours of aeronautical flight experience in multiengine airplanes; or have at least a total of 500 hours of aeronautical flight experience, 100 hours of aeronautical flight experience in multiengine airplanes, and 25 hours and 10 takeoffs and 10 landings in a B-17G; and
  - d. Have accomplished three takeoffs and three landings to a full stop in a B-17G within the previous 90 days before serving as SIC.
- 4. Vintage must develop and maintain a written B-17G qualification and recurrent ground training program for its PICs and SICs that covers the training subjects listed below. Each PIC and SIC must receive this training and be found competent and proficient in training on the following:

- a. General information and description of the airplane;
- b. Limitations;
- c. Aircraft servicing;
- d. Airspeeds;
- e. Fuel system;
- f. Electrical system;
- g. Hydraulic system;
- h. Engines;
- i. Instruments and avionics;
- j. Landing gear, brakes, controls, and flaps systems;
- k. Propeller;
- 1. Emergency procedures;
- m. Weight and balance;
- n. Performance planning; and
- o. Airplane's checklist.
- 5. Vintage must develop and maintain a written B-17G qualification and recurrent flight training program for its PICs that covers the areas of operations and tasks listed in the Practical Test Standards for "Airline Transport Rating and/or Type Rating Practical Test Standards," FAA-S-8081-5B, and each PIC must receive this training and be found competent and proficient in those areas of operations and tasks before being assigned PIC responsibilities and duties.
- 6. Vintage must develop and maintain a written B-17G qualification and recurrent flight training program for its SICs that covers the maneuvers and procedures listed below. Each SIC must receive this training and be found competent and proficient on the following maneuvers and procedures before being assigned SIC responsibilities and duties:
  - a. Operational procedures applicable to the powerplant, equipment, and systems;
  - b. Performance specifications and limitations;

- c. Normal, abnormal, and emergency operating procedures;
- d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls;
- e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC; and
- f. Crew resource management training.

In addition, each SIC must be familiar with the aircraft flight manual, placards, and markings.

- 7. Each PIC must complete a proficiency practical test upon completion of the initial qualification training program and upon completion of the recurrent training program (every 12 calendar months after completion of the initial qualification training program) that covers the areas of operations and tasks listed in the "Type Rating Practical Test Standards," FAA-S-8081-5B. Each PIC must be found competent and proficient in those areas of operation and tasks before being assigned PIC duties and responsibilities.
- 8. Each SIC must complete a proficiency practical test upon completion of the initial qualification training program and upon completion of the recurrent training program (every 12 calendar months after completion of the initial qualification training program) that covers the following maneuvers and procedures before being assigned SIC responsibilities and duties:
  - a. Operational procedures applicable to the powerplant, equipment, and systems;
  - b. Performance specifications and limitations;
  - c. Normal, abnormal, and emergency operating procedures;
  - d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls;
  - e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC; and
  - f. Crew resource management training.

In addition, each SIC must be familiar with the aircraft flight manual, placards, and markings.

9. Vintage's B-17G qualification and recurrent ground and flight training programs listed in Condition Nos. 4, 5,

- and 6 must be made available to the Dallas-Fort Worth Flight Standards District Office (SW FSDO No. 7; 2150 Northbound Access Road, DFW Business Center, Suite 400, Fort Worth, Texas 76261) upon receipt.
- 10. Vintage must have the services of an FAA-certificated airframe and powerplant mechanic or an appropriately rated repair station available at all stopovers to perform all required maintenance inspections and repairs.
- 11. Vintage will maintain the following information and records and will make those records available for review by the FAA when requested:
  - a. The name of each pilot crewmember Vintage authorizes to conduct flight operations in its airplanes under the terms of this exemption;
  - b. Copies of each PIC's and SIC's pilot certificate, medical certificate, qualifications, and recurrent training documentation in the B-17G to comply with Condition Nos. 2 and 3;
  - c. Records of maintenance performed and maintenance inspection records to comply with Condition No. 1; and
  - d. A listing of any incident, accident, or mechanical failure of the airframe, propellers, or engine that occur during this exemption. That listing will include the date of the incident, accident, or failure; all information on the possible cause factors; and the extent of injuries sustained.
- 12. Before permitting a person to be carried on board its airplane for the purposes authorized under this exemption, Vintage will inform that person that its airplane holds a limited airworthiness certificate, the significance of a limited airworthiness certificate as compared to a standard airworthiness certificate, and that the FAA has authorized this flight under a grant of exemption from the requirements of Sections 91.315, 119.5(g), and 119.21(a). The explanation of the significance of a limited airworthiness certificate compared to a standard airworthiness certificate must include at least the following information:
  - a. The FAA has not established nor has it approved limited category airworthiness certificated aircraft manufacturer standards. In contrast, standard category airworthiness certificated aircraft are manufactured to FAA-approved standards, including standards addressing the

design of the aircraft and life-limited parts.

- b. Limited category airworthiness certificated aircraft are issued when the FAA finds the aircraft -
  - (i) Has been previously issued a limited category type certificate and the aircraft conforms to that type certificate; and
  - (ii) To be in a good state of preservation and repair and a safe operating condition.
- c. Standard category airworthiness certificates are issued for an aircraft when the FAA finds the -
  - (i) Aircraft has been built and maintained in accordance with that aircraft's type certification standards as established by the FAA; and
  - (ii) Aircraft's inspection and maintenance requirements are in compliance with the applicable Federal Aviation Regulations.
- 13. All flight operations must be conducted
  - a. At a minimum operating altitude of not less than 1,000 feet above the ground (AGL);
  - b. Between the hours of official sunrise and sunset, as established in the American Air Almanac, as converted to local time;
  - c. With a minimum flight visibility of not less than 5 statute miles;
  - d. With a minimum ceiling of not less than 2,000 feet AGL; and
  - e. Within a 50-nautical-mile radius of the departure airport with landing permitted only at that departure airport.
- 14. No persons other than the assigned flight crewmembers may be permitted on the flight deck of the airplane during flight operations.
- 15. Except for essential crewmembers, all flight operations must carry no more than the maximum number of passengers permitted by the aircraft's weight and balance limitations and number of approved seats in the aircraft.

- 16. Except for an emergency locator transmitter, Vintage's airplane must have the equipment listed in Section 91.205(b), and that equipment must be in an operable condition during the flight.
- 17. If the airplane is to be operated overwater and beyond the power-off gliding distance from shore, Vintage's airplane must have the equipment listed in Section 91.205(b)(11), and that equipment must be in an operable condition during the flight.
- 18. Vintage must hold and continue to hold a determination from the U.S. Internal Revenue Service that it is a Section 501(c)(3) nonprofit, tax-exempt, charitable organization under Sections 509(a)(1) and 170(b)(1)(A)(vi) of the Internal Revenue Code.

This exemption terminates on May 31, 2000, unless sooner superseded or rescinded.

Sincerely,

/s/ Tom E. Stuckey
Acting Director, Flight Standards Service